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29 January 2010

**ASX Limited**

Dear Sir / Madam

The following summarises the results of activity for the quarter ended 31 December 2009:

## **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31<sup>ST</sup> DECEMBER 2009**

### **HIGHLIGHTS**

- **Proposed acquisition of the 2,000 square kilometre Peak Hill – Doolgunna project (adjacent to Sandfire Resources' Degrussa Cu-Au discovery in the North Murchison Goldfield) was announced to the ASX on 10<sup>th</sup> December 2009.**
- **Drill testing of the Wildcatters North EM conductor and the footwall zone of the Abattoir prospect is scheduled for January 2010.**
- **At December 31<sup>st</sup> 2009 Lodestar had cash reserves of \$2.03 million. Lodestar continues to seek and review projects suitable for farm-in or acquisition.**

## ACQUISITION OF THE PEAK HILL – DOOLGUNNA PROJECT

Lodestar announced to the Australian Stock Exchange (ASX) on the 10<sup>th</sup> December 2009 that it had entered a purchase agreement to acquire a tenement package covering 2,056 square kilometres in the Northern Murchison Goldfield. The Peak Hill – Doolgunna project extends 140 kilometres in a north easterly direction from immediately north of Sandfire Resource’s Degruusa Cu-Au discovery and includes part of the strike extent of the large scale Jenkin Fault and associated structures (Figure 1). The region is very significantly endowed with Archaean and Proterozoic mesothermal gold mineralisation and is prospective for a range of Proterozoic base and precious metal deposits e.g. Cu-Au VMS style (Horseshoe Lights, Degruusa), Pb-Zn-Cu stratiform (SEDEX) and MVT style, shear-hosted (hydrothermal) Cu-Au deposits (Thaduna) and Cainozoic calcrete-hosted uranium.

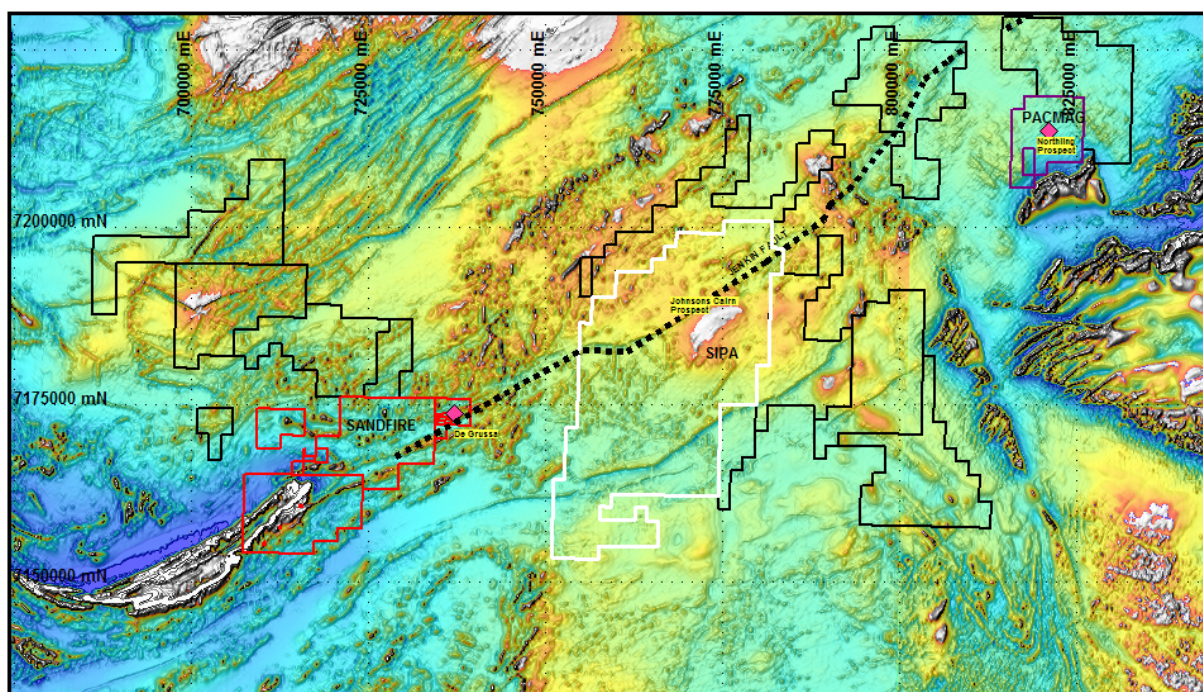


Figure 1 Peak Hill-Doolgunna project (black) on TMI aeromagnetic image Magnetic data (c) Commonwealth of Australia (Geoscience Australia) 2003

On-going assessment and due diligence of the proposed acquisition has formed a major part of corporate activity for the latter part of the December quarter.

## PENFOLD NICKEL PROJECT

### Wildcatters (WCN) EM Conductor (East Location 51)

First-pass RAB/aircore drilling is planned for January, subject to drill rig availability.

## Regional Sampling

The assay results have been received for fifty phase 2 surface samples collected from historic RAB drilling, a localised soil sampling program over the WCN EM conductor and regional rock chip sampling on the eastern margin of the Penfold project.

Twenty soil samples were collected across the WCN EM conductor on a 20m x 100m grid. Three traverses were completed, comprising a <math>-2\text{mm}</math> soil fraction collected from a depth of approximately 30cm. The samples from the western ends of each traverse were consistently collected from a well developed calcrete horizon, whilst those from the eastern end of the traverse were collected from loamy soils containing ferruginous, laterite-derived fragments. The eastern end of the traverses coincides with a shallow drainage and the effectiveness of the sampling in this area is questionable.

The soil sampling program is inconclusive as it has not identified any definitive anomalies; the sample set is small, the ranges of indicator elements are very limited and the maximum values for individual indicator elements (Ni, Cu, Pt and Pd) occur in different samples.

Figures 2 to 4 illustrate the distribution of the indicator elements in relation to magnetic anomalies and the WCN EM conductor.

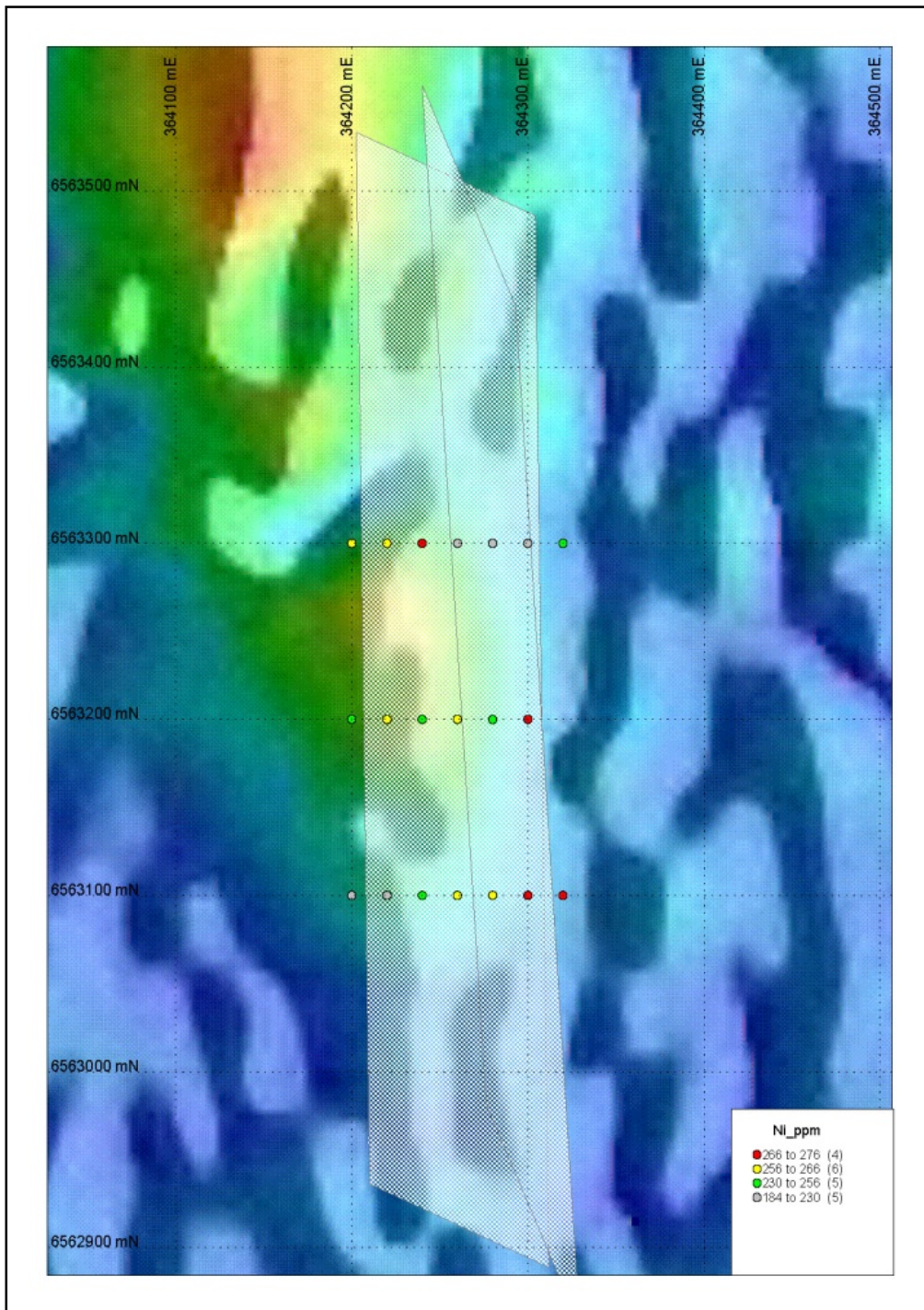


Figure 2 Ni distribution in soil - WCN conductor

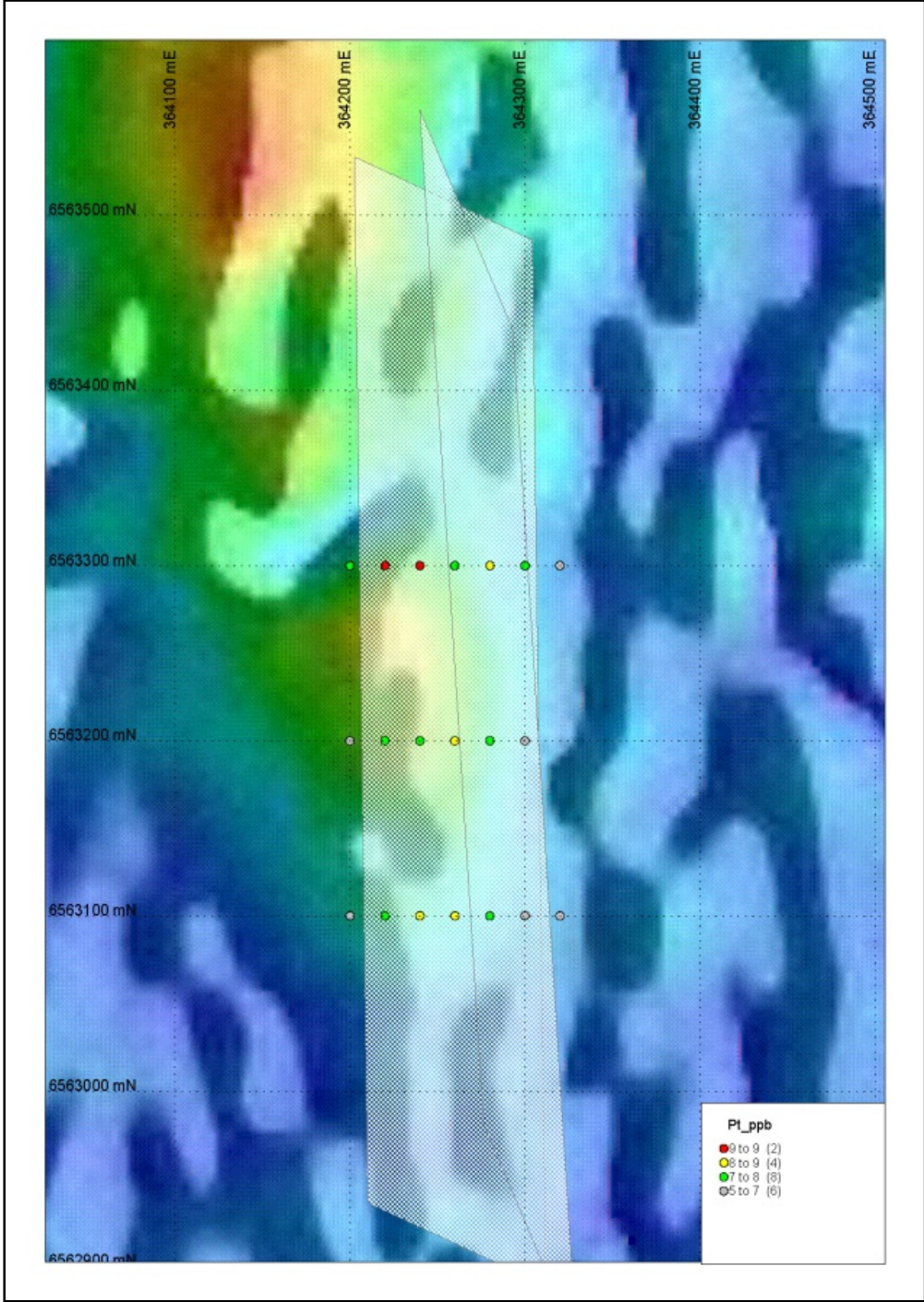


Figure 3 Pt distribution in soil - WCN conductor

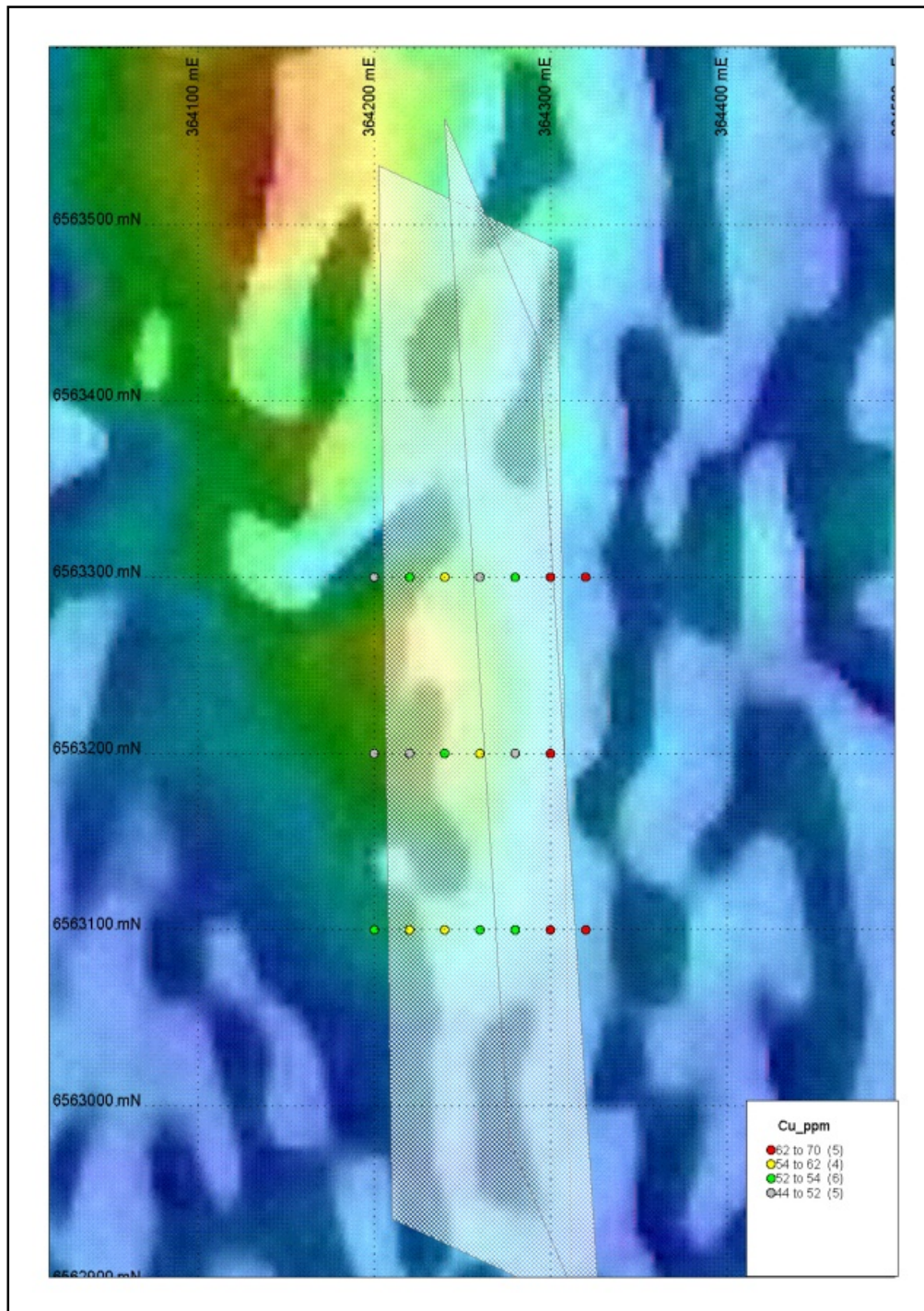


Figure 4 Cu distribution in soil - WCN conductor

Twenty six samples were collected from historic RAB drill holes in the area of the WCN EM anomaly. The sampled holes do not provide coverage over the EM anomaly and the sampling program served mainly to verify the geochemical characteristics of the ultramafic geology. No coincident anomalies were identified; Ni and Cr values correlate with the magnetic zones as shown in Figure 5.

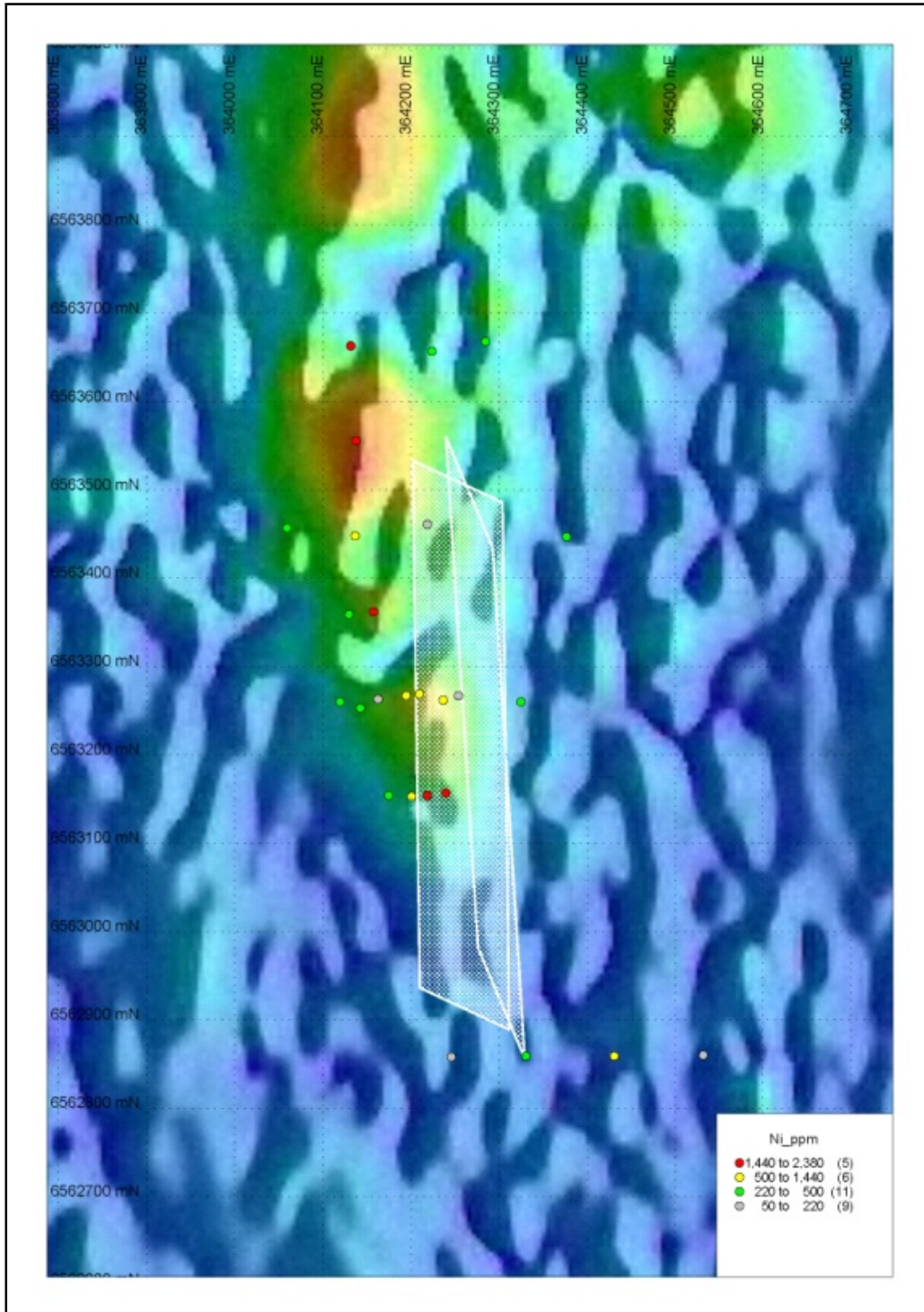


Figure 5 Distribution of Nickel in historic RAB drilling - WCN EM conductor

## Planned Activities for Next Quarter

- RAB drilling of the Wildcatters North EM target and the western (footwall) margin of the Abattoir ultramafic sequence.

Yours faithfully

**LODESTAR MINERALS LIMITED**

A handwritten signature in blue ink, appearing to read 'B. Clayton', is positioned above the printed name.

**BILL CLAYTON**

Managing Director

The information in this report that relates to Exploration Results is based on information compiled by Mr Bill Clayton, Managing Director, who is a member of the Australian Institute of Geologists, and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Clayton consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98.

Name of entity

LODESTAR MINERALS LIMITED

ACN or ARBN

127 026 528

Quarter ended ("current quarter")

31 December 2009

### Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (6 months) \$A'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for		
(a) exploration and evaluation	(191)	(328)
(b) development	-	-
(c) production	-	-
(d) administration	(122)	(214)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	15	31
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other (provide details if material)	-	-
<b>Net Operating Cash Flows</b>	<b>(298)</b>	<b>(511)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.9 Proceeds from sale of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other – payment of refundable deposit	-	-
<b>Net investing cash flows</b>	<b>-</b>	<b>-</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(298)</b>	<b>(511)</b>

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(298)	(511)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other	-	-
	<b>Net financing cash flows</b>	-	-
	<b>Net increase (decrease) in cash held</b>	(298)	(511)
1.20	Cash at beginning of quarter/year to date	2,331	2,544
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	2,033	2,033

**Payments to directors of the entity and associates of the directors**  
**Payments to related entities of the entity and associates of the related entities**

	Current quarter \$A'000	
1.23	Aggregate amount of payments to the parties included in item 1.2	93
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Includes salaries paid to directors, as well as superannuation paid on behalf of directors. Also included is office rent and office running expenses.

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

N/A

+ See chapter 19 for defined terms.

### Financing facilities available

*Add notes as necessary for an understanding of the position.*

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	220
4.2 Development	-
<b>Total</b>	<b>220</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.2

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	2,033	2,331
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>	<b>2,033</b>	<b>2,331</b>

### Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed			
6.2	Interests in mining tenements acquired or increased			

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

**Issued and quoted securities at end of current quarter**

*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference +securities	Nil	N/A	N/A	N/A
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	N/A	N/A	N/A	N/A
7.3 +Ordinary securities **	50,000,003	50,000,003	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5 +Convertible debt securities	Nil	N/A	N/A	N/A
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	N/A	N/A	N/A	N/A
7.7 Options			<i>Exercise price</i>	<i>Expiry date</i>
Listed options	0	0	N/A	N/A
7.8 Issued during quarter	N/A	N/A	N/A	N/A
7.9 Exercised during quarter	0	0	N/A	N/A
7.10 Expired during quarter	Nil	N/A	N/A	N/A
7.11 Debentures (totals only)	Nil	N/A		
7.12 Unsecured notes (totals only)	Nil	N/A		

+ See chapter 19 for defined terms.

## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Law or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:   
Director

Date: 29 January 2010

Print name: David McArthur

## Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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